645.3	meter Chain Link Fence (Pipe Top Rail) Vinyl Coated – (Line Post - Option)	Meter
646.1*	meter Chain Link Fence (Cable Top) (Fabric and Line Post - Option)	Meter
646.3	meter Chain Link Fence (Cable Top) Vinyl Coated (Line Post - Option)	Meter
647.1*	meter Chain Link Fence (Pipe Top Rail) With Barbed Wire	
	(Fabric and Line - Post Option)	Meter
648.1*	meter Chain Link Fence (Cable Top) With Barbed Wire	
	(Fabric and Line Post - Option)	Meter
649.1*	meter Chain Link Fence (Spring Tension Wire) With Barbed Wire	
	(Fabric and Line Post - Option)	Meter
650.1*	meter Chain Link Gate, With Gate Posts	Meter
651.1*	meter Chain Link Gate, With Gate Posts and Barbed Wire	Meter
652.*	meter Chain Link Fence End Post	Each
653.*	meter Chain Link Corner and Intermediate Brace Post	Each
654.*	meter Chain Link Fence Fabric	Meter
144.	Class B Rock Excavation	Cubic Meter
901.3	30 MPa - 40 mm - 335 kg Cement Concrete Masonry for Post Foundation	Cubic Meter

^{*}Insert height of fence or gate at beginning of nomenclature.

When option is stipulated in above items the Contractor will be required to indicate his/her choice.

SECTION 660

METAL PIPE RAIL

DESCRIPTION

660.20 General.

This work shall consist of the construction of metal pipe rail in accordance with these specifications and in close conformity with the lines and grades shown on the plan or established by the Engineer.

MATERIALS

660.40 General.

Materials shall meet the requirements specified in the following Subsections of Division III, Materials:

D 11 1D .	3.50.10.04
Rails and Posts	M8.10.0A
Fittings	M8.10.0B
Lead Wool	M8.10.0C
Bitumen	M8.10.0D
Paint (Primer Coat)	
Zinc Dust-Zinc Oxide	M7.04.07
Paint (Finish Coat)	
Enamel	M7.03.02

CONSTRUCTION METHODS

660.60 Fabrication and Erection.

Massachusetts Highway Department 1995 Standard Specifications for Highways and Bridges

All posts shall be set vertical. In setting the posts precautions shall be taken to insure proper alignment and leveling to prevent springing or bending the railing in erecting.

All railings shall be straightened as required before setting up. All horizontal pipes shall be provided with approved expansion couplings at intervals of not more than 15 meters.

Welding shall conform to the requirements of Subsection 960.61.

After erection and welding all welds shall be cleaned and coated with a spot coat of M7.04.07

(TT-P-641G, Type 11 Primer Coating: Zinc Dust-Zinc Oxide).

The fabricator shall be on the Department's approved fabricator's list.

660.61 Painting.

After erection and welding the completed rail shall be painted with one (1) coat of M7.04.07 and a color coat of M7.03.02, Color No. 10075. Painting shall conform to Subsection 960.63.

COMPENSATION

660.80 Method of Measurement.

The pipe rail will be measured in place and the quantity to be paid will be the length as constructed outside to outside of end posts or top rail whichever is the greater.

660.81 Basis of Payment.

The pipe rail will be paid for at the contract unit price per meter under the item for Metal Pipe Rail, complete in place.

660.82 Payment Items.

660. Metal Pipe Rail

Meter

SECTION 665

FENCES AND GATES REMOVED AND RESET, AND REMOVED AND STACKED

DESCRIPTION

665.20 General.

This work shall consist of removing present fences and gates and resetting or stacking them in accordance with these specifications and in close conformity with the lines and grades shown on the plan or established by the Engineer.

MATERIALS

665.40 General.

The materials removed shall be utilized in the fence and gates for resetting except, where necessary, new posts and bases shall be furnished by the Contractor. Any materials missing, damaged or lost during or subsequent to removal shall be replaced by the Contractor without any additional compensation.

All new materials required shall be equal in quality and design to the materials in the present fence or gates.

CONSTRUCTION METHODS